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ABSTRACT

This transcript reproduces a Department of Education/College Board sponsored discussion on ways to expand advanced placement (AP) opportunities in high schools. The deliberations opened with a presentation by Phil Chavez, an assistant principal in San Antonio, Texas, who outlined the genesis and development of the AP program in his predominantly Hispanic high school. He discussed the importance of interschool collaboration, the use of vertical teams, and the need to train teachers for these courses. The next speaker, Rex Bolinger, a high-school principal in Angola, Indiana, described the origins of his school's academic excellence and the emphasis on partnerships, technology, and AP courses. He detailed collaborative efforts with the local university and the need to include other schools in the community in AP programs. Next, Bob Moses, Director of the Algebra Project, discussed the Young People's Project, an initiative that turned Mississippi's middle-school students into leaders. He also described the Algebra Project and how it motivates middle-school students to prepare for high school. The final speaker, Diana Kraus, an AP English teacher at a high school in Tomson, Maine, described the need to teach students study skills and the importance of a supportive program. (RJM)

TRANSCRIPT OF PROCEEDINGS

UNITED STATES OF AMERICA

DEPARTMENT OF EDUCATION

* * *

A FORUM TO EXPAND ADVANCED

PLACEMENT OPPORTUNITIES:

INCREASING ACCESS AND IMPROVING

PREPARATION IN HIGH SCHOOLS

* * *

STRATEGIES TO OVERCOME CHALLENGES

IN RURAL AND SMALL SCHOOLS

* * *

SPRINGWOOD

FIRST AND SECOND BREAKOUT SESSIONS

WASHINGTON, D.C.

FIRDAY, FEBRUARY 11, 2000

(THIS TRANSCRIPT WAS PRODUCED FROM A TAPE RECORDING.)

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DEPARTMENT OF EDUCATION
NATIONAL FORUM TO EXPAND ADVANCED PLACEMENT
OPPORTUNITIES
Springwood 1st Session

TAPE 1

(Tape Side A.)

GAIL SCHWARTZ: Welcome, everybody. I think we'll go ahead and get started, and I know that they have done a lot of moving up, pushing things up this morning.

So, I hope everyone is calm and settled and where they want to be.

I am Gail Schwartz, and I am with the Department of Education here in Washington.

I direct an initiative called New American High Schools, and I work out of the office, interestingly enough, in vocational and adult education.

But, our high school work--our New

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1 American High Schools initiative--started about five,
2 six years ago, kind of a homespun initiative, if you
3 can call anything Federal homespun.

4 It was really designed to get--build some
5 momentum for high school issues and high school
6 reform.

7 We now are working very collaboratively
8 with our partners across the street from us at the
9 Office of Elementary and Secondary Education.

10 There is a tremendous amount of work now
11 going on at the Department around high schools
12 issues, and I will share those with you later.

13 But, I want to introduce now our
14 panelists, and each of our panelists, we are
15 delighted to have each of them.

16 They are terrific, and they will each take
17 about ten minutes to talk about some of the issues
18 and how they have grappled with them around
19 incorporating AP courses into their curriculum in
20 their small and rural schools.

21 I will just introduce them, and then we'll
22 get rolling.

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1 First is, down at the end of the table,
2 Robert Moses, who is the Director or President of the
3 Algebra Project.

4 He is from Mississippi. We are delighted
5 to have him, and recently won the Haines Award?
6 Heinz Award, sorry.

7 Congratulations on that. Maybe you'll
8 tell folks a little bit about that.

9 To Bob's right is Rex Bolinger, who is
10 principal of Angola High School in Angola, Indiana.

11 Next to Rex is Phil Chavez, who is the
12 Assistant Principal at Southside High School in San
13 Antonio, Texas.

14 Last but not least is Diana Kraus, who is
15 an AP English teacher at Mount Ararat High School in
16 Topsom, Maine.

17 So, we are going to start with Phil. As I
18 said, he is going to take about ten minutes just to
19 give you an overview of the work that he's involved
20 with in San Antonio.

21 Take it away, Phil.

22 PHIL CHAVEZ: Good morning. After hearing

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1 that rousing speech this morning, it seems that he
2 set the stage for what AP should be--what direction
3 we should go in.

4 Basically, I want to give you a little
5 background about our school.

6 We are a rural school in the southern apex
7 of San Antonio, Texas.

8 Basically, we have no industry. That's
9 (inaudible) rivers flowing south, we do have several
10 sewage treatment plants in the area, golf courses,
11 things of that nature.

12 But, nothing to really generate any
13 revenue. (inaudible) approximately (inaudible)
14 square miles (inaudible) high school is
15 approximately, as of yesterday, 1007 students.

16 Seventy-seven (77) percent of our students
17 are low socioeconomic students, okay? Eighty-one
18 (81) percent of our students are Hispanic.

19 Last year, 75 percent of our students
20 applied to college (inaudible). So, what kind of
21 courses do we offer?

22 Well, this year, as a result of last

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1 year's problem with a counselor, we have two less AP
2 courses, and that's one of the things I want to focus
3 on.

4 It's a team effort at the campus level as
5 well as the district level. We offer biology,
6 physics B and C, calculus AP, and BC, English
7 literature, English language, studio art, spanish
8 language that should be spanish literature.

9 Actually, I want to tell you a little
10 story about spanish. Fifteen years ago, we had a
11 gentleman by the name of Mr. (inaudible), who started
12 the AP spanish program, along with Mr. (inaudible),
13 our principal at the time.

14 It was the first AP course offered along
15 with (inaudible) literature, and he had, at the end
16 of the year, a large percent of fours and fives for
17 the first time ever offered.

18 This course served as a nucleus for us to
19 build the other AP courses, and that was our strong
20 point.

21 Obviously, with 81 percent Hispanic, there
22 was a little bit of knowledge of the language, and so

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1 we went to the next year.

2 We're going to offer economics, government
3 politics, music theory, statistics, computer science
4 A, chemistry.

5 Of these, we have offered government and
6 politics, statistics, computer science, and chemistry
7 in the past.

8 But, there was a little idea from one
9 particular counselor that thought that maybe these
10 students couldn't really make it in these courses.

11 As a result, they didn't make it.
12 Academic excellence -- the first thing I want to
13 speak about.

14 You have to have an aura of academic
15 excellence in the entire school, and along with that
16 you have to ensure student success, okay?

17 We can top academic excellence. We don't
18 ensure student success (inaudible) off the bar.

19 The second thing is to key people,
20 involving administration, department chairs, and the
21 counseling office to develop an effective strand of
22 courses.

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1 We place the AP courses at the capstone of
2 that particular strand.

3 When I say "strand," we're talking 6th,
4 7th, 8th, all the way through 12th grade, okay, the
5 concept of a vertical team, which I will speak to in
6 a tad bit.

7 But, it's important again to ensure
8 student success in the AP program, we just don't all
9 of a sudden say: Okay, after a second year of
10 English, you're going to jump into English language.

11 They haven't focused on basic skills in
12 English prior to that, so don't expect the students
13 to be as successful.

14 When the teachers place a high mark up in
15 this level, possibilities that the students aren't
16 going to succeed are high.

17 So, you have to look at those (inaudible)
18 courses. You have to look at (inaudible) junior
19 high.

20 At Southside, (inaudible) very fortunate.
21 Even though we number 243 square miles, the primary,
22 intermediates, the junior high campus, and the high

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1 school are sit on one large campus.

2 So, one would think that these teachers at
3 the junior high or the middle school, rather, the
4 high school, constantly dialogue.

5 Well, no. They could be a stone's throw
6 away or they could be several miles away. That's not
7 going to occur.

8 It has to come from the administration
9 (inaudible) giving them the break-out time.

10 Master schedule -- working in a master
11 schedule where students could take these courses.

12 Now, 1007 students in small schools.
13 What's the biggest problem?

14 Well, you can have this group of students
15 that take band, athletics, and then they want to take
16 the AP English.

17 They want to take all these different
18 courses. Well, you have to structure the pre-AP
19 courses and your AP courses such that everyone has an
20 opportunity.

21 Vertical team -- We, in the vertical
22 teams, you must allow these teachers time to

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1 conference, time to look at what is taught.

2 We want to have a program that (inaudible)
3 written curriculum that the state provides. There's
4 the test curriculum that the state tests, and then
5 individuals in the classroom test.

6 Then, there is (inaudible) curriculum that
7 is taught, okay. We look at the curriculum that was
8 taught. We surveyed these teachers with the
9 (inaudible) -- what concepts, what topics, what
10 overarching themes do you cover -- and from there
11 started to develop a strand of courses that had
12 (inaudible) capstone course, the AP language
13 literature, or whatever AP course (inaudible).

14 Out of this dialogue, we were able to set
15 up some successful pre-AP courses, and, just as Jerry
16 mentioned early this morning, algebra 1 courses for
17 the 8th grade.

18 Now, recently we went to a core plus math
19 system. I don't know if any of you are familiar with
20 the core plus math system.

21 But, it was a math program developed by a
22 grant from the National Science Foundation that

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1 combines the algebra, geometry, and algebra 2
2 together.

3 So, we offer algebra 1, math 1, math 2,
4 and math 3. We are currently looking at offering the
5 math 1 at the 8th grade level to ensure success.

6 (Pause.)

7 PHIL CHAVEZ: Recruitment -- the concept
8 at Southside is to allow students to (inaudible)
9 courses with as little resistance as possible.

10 (inaudible) addresses the idea of the
11 general course that Jerry was talking about earlier.
12 What is a general course?

13 We should make all students have access to
14 these courses. One of the biggest recruiters-- I
15 taught AP biology for 13 years in the same school
16 (inaudible) rat race of vice principal (inaudible).

17 I miss the classroom quite a bit, but I
18 found--we find that the best recruiter for an AP
19 course are the students in that course.

20 We also invite back--let me come down here
21 to alumni day--we also invite back several of our
22 alumni who are currently in college.

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1 These, we form a panel, both in the Fall
2 during the Christmas break--obviously (inaudible)--
3 and also in the Fall.

4 We try to do this around Spring break,
5 because that's about the time when our students are
6 scheduled (inaudible) courses for the following year.

7 They talk about their experience in
8 transitioning from high school to college, and every
9 one of these students think--comes back and say: The
10 courses that you have to take are Advanced Placement.
11 These are the only courses.

12 They start rattling off the names of the
13 teachers and what they did, and how it helped them,
14 and how, even though, "I only scored a two," or
15 perhaps I even had a student who score a one, when
16 they went to college, people came to that individual
17 to look at his notes that he used in high school.

18 That gave that student some power, some
19 knowledge. Knowledge is power, and that gave that
20 student a lot of motivation to continue on in
21 college.

22 I think some of those statistics of

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1 students who take AP courses and are successful in
2 college--not only applying but are successful--kind
3 of proves the success of this particular alumni day.

4 AP summer institutes -- last year, we sent
5 eight teachers to an AP summer institute.

6 We sent three pre-AP teachers. Now, in
7 the state of Texas, they allow us a reimbursement of
8 up to \$450 for each teacher as long as they teach the
9 following year, or teach that particular course.

10 Of the seven that we've sent, we've sent
11 four of them who are going to teach in AP class the
12 following year, three of them were doing the pre-AP.

13 Why do we do this? We did this, because
14 basically (inaudible) content of government, content
15 of biology, the content of chemistry.

16 If we send teachers to a summer workshop,
17 upon their arrival, their knowledge in AP kind of
18 trickles on down to their other courses.

19 Remember, these guys teach four or five
20 other courses throughout the day (inaudible)
21 referring back to the general courses.

22 We find that teachers, their teaching

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1 abilities, their knowledge and strategies, are
2 trickled down to the other courses.

3 That's why we sent these teachers to work
4 (inaudible) summer institute.

5 Fee waivers -- the fee waivers provided
6 for low-income families by the College Board and also
7 the school rebate (inaudible) school rebate, the
8 Texas Education Agency covers \$30 of every AP exam
9 for every student.

10 The number (inaudible) dramatically. The
11 Texas Education Agency also, if you have a low
12 socioeconomic student, that student ends of
13 (inaudible) \$5.

14 Well, ten years ago when we started this
15 program, we were footing the bill through Title I
16 monies, strangely enough.

17 Our bill was up towards \$7000, \$8000 to
18 \$10,000, but we felt that was important to see this
19 AP program (inaudible).

20 Fortunately, now we're being compensated
21 (inaudible). If you are going to start up with AP
22 course (inaudible) in a small school that has a

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1 problem with budgets, you need to budget for these
2 items -- traditional materials in English,
3 mathematics.

4 All of our 9th and 10th grade students
5 have TI's 83 calculators in their programs
6 (inaudible) classes, and that costs us about \$35,000
7 this past year.

8 You have to budget sometimes over two or
9 three years, especially the sciences -- chemistry
10 labs, biology labs.

11 (inaudible) recommended, then I recommend
12 that you do have the teachers follow through with
13 that, because one of the questions (inaudible) pre-
14 response questions is based on (inaudible).

15 Satellite AP was something that we started
16 a year before last. We didn't have enough people to
17 make a particular class, so we offered via satellite.

18 I had no idea how the students are going
19 to respond to this. (inaudible) going to come back
20 and say: We don't like this.

21 Much to my chagrin, they enjoyed it, and
22 they were very successful with the program.

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1 This year, we are currently using it as a
2 supplement to our physics teacher. Our physics
3 teacher teaches physics B and physics C, trig, and
4 calculus base.

5 Basically, he uses this for the physics B
6 (inaudible) program via Ball State University, and he
7 supplements that with the videos and meets with them
8 every day.

9 Ninth grade teaming -- 9th grade teaming
10 allows a group of students to follow the same core
11 teachers. These core teachers are then able to do
12 certain types of (inaudible) units throughout the
13 year.

14 Also, these team members that are teaching
15 the pre-AP courses, we have also sent them to summer
16 institutes over the past four years.

17 Again, the knowledge of content comes back
18 into class.

19 Summer schools -- we offer a pre-calculus
20 course free of charge during the summer for any
21 student who wishes to take that.

22 This pre-calculus course is taught by our

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1 calculus AB and BC teacher. This summer, we are
2 going to start offering the algebra 2 course during
3 the summer.

4 It will be taught by our pre-calculus
5 teacher, so these teachers are going to have them in
6 the summer and during the year.

7 We also block off our AP calculus every
8 day, so they meet 90 minutes every day throughout the
9 year.

10 Finally, a last incentive that we offer
11 for students (inaudible) AP course, obviously the
12 (inaudible) is their main concern (inaudible)
13 competitive and we offer a ten-point (inaudible)
14 students who are enrolled in the AP courses.

15 I wish we had some more time, because
16 there's quite a few programs that we use and have
17 implemented (inaudible) tried in the past, but the
18 (inaudible).

19 VOICE: (inaudible)

20 VOICE: We're going to pass out copies of
21 his notes, and we're going to go to Rex now, and we
22 will have time for--not as much time as we'll want, I

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1 know, but we'll have time for discussion.

2 (Pause.)

3 REX BOLINGER: Bill is going to help me
4 pass a statistical booklet for Angola High School,
5 and there may not be one for everyone.

6 If not, I have cards (inaudible) maybe you
7 can share with each other at your tables. If we
8 don't have enough, I think I'll be close.

9 I am going just a few minutes.
10 (inaudible) what Phil had to say without mirroring a
11 lot of his comments.

12 I am going to take just a little different
13 focus, and tell you that Angola High School is a
14 rural in northeast Indiana.

15 Before I go too much into who we are, may
16 I ask who you are? How many classroom teachers are
17 with us? I see your hands.

18 Okay. How many principals or
19 administrators? Okay. How many Department of Ed
20 folks? Okay. How many others?

21 Who are the others? What's your capacity?

22 VOICE: Counselor.

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1 VOICE: Education (inaudible).

2 REX BOLINGER: All right, welcome.

3 VOICE: (inaudible) center coordinator.

4 REX BOLINGER: Okay, great.

5 VOICE: (inaudible).

6 REX BOLINGER: All right, so obviously we
7 (inaudible) educators here, and I just want to get a
8 little feel for what some of your questions may be.

9 You heard Jerry Tirozzi talk this morning
10 about school reform and what that is, and we're all
11 talking about, and so forth.

12 But, I really feel like (inaudible) Angola
13 High School went through a process that I can go back
14 ten years to talk about the beginning of.

15 I really made a transition through
16 restructuring our school day and offering classes
17 differently (inaudible) engage (inaudible) intensive
18 staff development.

19 But, it also meant that we had to do an
20 excellent job, in our opinion, of comparing ourselves
21 to ourselves (inaudible) change and reporting that to
22 our communities, reporting it to all of our

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1 (inaudible), business sector, and so forth.

2 To us, education is all about partnerships
3 (inaudible) fusion of technology, and AP courses, to
4 us, are a very critical part of that whole aspect of
5 raising the bar and raising the standards, and so
6 forth.

7 You get a little feel for some of the
8 kinds of things that we're after, we try to keep data
9 on everything.

10 One of the charts that you'll see in the
11 booklet as you go through the back half of that
12 booklet are things like GPAs.

13 When I have visitors to the school, I
14 often show this slide (inaudible), because the blue
15 bars represent our school (inaudible) change.

16 The red bars (inaudible) represent GPAs
17 after going through that change on a semester basis.

18 (inaudible) you hear schools and high
19 schools talking about block scheduling. I talk about
20 Angola High School flexible scheduling, because it--

21 Block scheduling conjures up so many
22 things in people's minds that they say: Well,

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1 certainly that can't work because I know it doesn't
2 work in (inaudible) -- whatever that might be.

3 VOICE: So what do you mean when you say
4 "block scheduling"?

5 REX BOLINGER: What I mean when I say
6 block scheduling is that we are creating a time
7 schedule in our building where students and teachers
8 have a better, efficient use of time, and we create
9 it and they can become flexible around different
10 needs.

11 For example, some people might say that we
12 are on a 4X4 block schedule, where courses are
13 compressed within a semester, and how can that be
14 good because things like fine arts and things where
15 we need to engage the kids all year can't work, and
16 things like AP can't work, and so forth?

17 Instead of that, we make them work, and we
18 talk about what's good for kids and what different
19 kinds of courses might be better suited working in a
20 different kind of structure within that schedule.

21 For example, I cannot accept the fact that
22 what we thought of as a traditional (inaudible) 50

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1 minutes of learning everyday has any impact upon
2 learning in any other form (inaudible) traditional
3 industrial model (inaudible).

4 Today, I could take our high school
5 teachers and say: You have this group of 25 or 30
6 kids, and you have them all day long for four weeks.

7 They would be fine, because they have
8 learned the essence of instructional strategies, ways
9 to change. People look at us and say: Yeah, but
10 research says kids learn better in shorter segments.

11 Well, we have it. We shift gears
12 (inaudible) segments of things that work.

13 The issue with us and AP--and we went to
14 partnerships to talk about (inaudible) slides.

15 Page 14 is all of my (inaudible) Advanced
16 Placement scores, and so forth, and they're all going
17 in a positive direction.

18 By the way, I just simply would announce
19 to you we started this discussion ten years ago, and
20 what we need to do to raise the standards to last
21 (inaudible).

22 That has been significant for us, and it

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1 has been more than just an award. (inaudible)
2 validation of the process that has shown significant
3 improvement from where we were.

4 Remember, we can only compare ourselves to
5 ourselves. We are different than (inaudible) school,
6 and we are different from each one of yours, as you
7 are.

8 But, if we know where we were, and we know
9 the standard we want to raise the bar to and we want
10 to keep working for that, how are we doing?

11 That is what this report is all about.
12 For example, when we talk about a partnership that we
13 thought was essential, we have a small, private
14 (inaudible) with 2000 students in our community.

15 (inaudible) Its focus is engineering, but
16 it has a Bachelor's Degree department (inaudible),
17 and so we have available higher level college-level
18 courses in things like math, science, and English
19 (inaudible) readily available to access (inaudible).

20 We were concerned about things like, when
21 we offer our AP in two blocks, how do we do this?

22 A lot of our schools (inaudible) run what

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1 they call (inaudible) match two APs together, and run
2 them all year in 90-minutes blocks.

3 Addressing the gap -- we feel that our
4 students, because of how our teachers have adjusted
5 to teaching strategies (inaudible) and balancing
6 their schedules, can do quite well and be prepared to
7 take the exam in two quarters.

8 But, that doesn't happen the way they are
9 given, and so we have to address that, because I
10 don't want gaps.

11 I don't want kids (inaudible) January and
12 taking the test in May, so we did a couple of
13 different things, but the thing that works well for
14 us--and we found, by statistics from ETS, that kids
15 on schedules like ours who did not--who had the gap
16 and only had two quarters were scoring (inaudible)
17 deviation (inaudible).

18 Kids on schedules like ours who have at
19 least three quarters, which is more time than
20 everyone else, were scoring (inaudible).

21 So, we just said we have got to make some
22 adjustments, and we went into partnerships because we

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1 don't have the staff (inaudible) small schools like
2 ours. What do you do?

3 (inaudible) So, we went to Tri-State
4 University, and they partnered with us on three of
5 our AP courses, calculus, chemistry, and AP
6 literature.

7 Our kids simply, when they finished two
8 quarters with us, simply moved to Tri-State
9 University.

10 Tri-State came to us for the first year
11 and brought their professors to our school at no
12 charge. We have a local foundation that subsidizes
13 their tuition (inaudible).

14 They are admitted to Tri-State University,
15 and Tri-State takes their private tuition and cuts it
16 in half, and then the foundation picks up the rest of
17 that on a needs basis.

18 Kids take (inaudible) or \$100 for tuition,
19 and Tri-State, if they finish that, will award them
20 up to eight college credits.

21 They have the option of sitting for the
22 exam or taking the transcript and going on. To me,

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1 that is a partnership, and it works quite well.

2 If I didn't have Tri-State in our back
3 yard, I would go to the nearest college I could go to
4 (inaudible) 30 miles away.

5 (inaudible) We offer seven AP courses.
6 In the courses that we don't have that partnership,
7 we have carved out of our schedule a way to offer
8 three quarters.

9 Generally, we are offering it (inaudible),
10 so they are just basically finishing up in that
11 fourth quarter when the test comes (inaudible).

12 VOICE: The classes that they are taking
13 at the university, is it the same class that they had
14 in school?

15 REX BOLINGER: No, it is the next level
16 up.

17 VOICE: The next level up?

18 REX BOLINGER: Yes. We did lots of work
19 with those professors (inaudible) Tri-State
20 University meeting with our AP teachers for long
21 periods of time.

22 When we first started doing this, I bet

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1 they met monthly for four months working curriculum,
2 and now Tri-State University, after five years, has
3 changed their schedule so that they are offering
4 their high-level calculus course on our schedule for
5 their students, and it is working beautifully.

6 We found there were a few problems with
7 their professors coming to our school and colleges
8 thinking that that experience was a Tri-State
9 University course, because we started to get
10 questions like: (inaudible) one of your teachers or
11 Tri-State's? (inaudible) Where was it taught, on
12 your campus or at the University--on our campus?
13 (inaudible)

14 A few places were saying things like that,
15 and now our kids are being immersed into the Tri-
16 State campus, and what we are hearing, by and large
17 over and over, is our kids are tough (inaudible).

18 Our kids are leading all (inaudible)
19 calculus courses, English courses, and things, and
20 sitting side by side with the college students.

21 The other partnership I want to mention,
22 and then I want (inaudible) is that there are four

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1 high schools around us.

2 We have 850 students. When we started
3 this, we had 750. Demographics suggest we are going
4 to level off pretty much, and I hope we do
5 (inaudible).

6 But, we have four small schools around us
7 that are (inaudible) 500 students, and they don't
8 offer any AP, so what we are doing is a county-wide
9 collaboration of matching our schedules so their kids
10 can get (inaudible).

11 (inaudible) average, we have about three
12 or four kids from each of those schools in our AP
13 classes, and we are now moving on (inaudible) Tri-
14 State connection, like I mentioned our kids are
15 doing.

16 The next step (inaudible) reason I am
17 excited about being here and trying to go for one of
18 these grants is that we are going to look at the
19 partnership of, okay, let's offer the AP courses now
20 (inaudible) high school and your courses, and get one
21 course going there so our kids can go to those
22 courses.

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1 That drive--the farthest drive is about
2 ten miles, and on our schedule, with the time that we
3 can play (inaudible) morning and afternoons, we can
4 get our kids there either by running shuttles, or we
5 do let them drive on their own (inaudible) their own
6 transportation, and some do.

7 We will get them there one way or another,
8 but that is the (inaudible) kind of partnership we
9 are looking at.

10 So, we have small universities and small
11 schools within a ten-mile radius (inaudible)
12 resources (inaudible). That's enough from me.

13 VOICE: Well, it's not enough, but it will
14 be enough right now, so we can go to Bob.

15 (Pause.)

16 VOICE: I was asked to talk just a minute
17 about the demographics of our school. It is in the
18 front sections of the book that you have.

19 But, our diversity is mainly around
20 socioeconomic levels. We are about three percent
21 minority but about 40 or so percent free and reduced
22 lunch, and (inaudible), and only about 25 percent

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1 that apply.

2 So, that gives you a little bit of
3 background about our rural community.

4 BOB MOSES: My name is Bob Moses. I asked
5 Rex to do (inaudible) trying to figure out my place
6 in the discussion.

7 (inaudible) asked me to come here a couple
8 of weeks ago (inaudible) Spanish-speaking, and Rex's
9 school is overwhelmingly rural white.

10 I think my job is to talk about what is
11 going on (inaudible) African-Americans, and it struck
12 me how segregated our schools are (inaudible).

13 This is across the country, and of course
14 the AP issue (inaudible) heightens that (inaudible)
15 equity (inaudible).

16 I will tell you a little story, and then
17 that will lead into what I do (inaudible).

18 I am actually not from Mississippi.
19 (inaudible) for the last six years. I go home on
20 weekends to Cambridge, Massachusetts.

21 About six years ago, we invited
22 (inaudible) Edwards from Fayetteville, North Carolina

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1 to give a workshop (inaudible) middle school students
2 on the (inaudible).

3 It was their first middle school
4 (inaudible). It was their first introduction
5 (inaudible).

6 We asked Theo if we could bring some
7 middle school students into the workshop, because I
8 was working in Jackson with middle school students at
9 Brinkley Middle School.

10 So, he said yes, and we did. Well, the
11 bottom line was that, in the following school year,
12 not one of the middle school teachers felt
13 comfortable enough with the (inaudible) to take it
14 out and use it in the classroom.

15 (inaudible) They were from the rural
16 schools in Mississippi, but the middle school
17 students became leaders in their classes (inaudible).

18 They were willing to get up in front of
19 their peers and use those (inaudible) and show the
20 students what they knew.

21 It opened a light bulb for some of us,
22 because it occurred to us that (inaudible) is a tool

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1 which they feel is worthy of their (inaudible).

2 (inaudible) calculator is worthy of their
3 attention in a way that they don't feel about
4 (inaudible) mathematics, because they have grown up--
5 this younger generation--pushing buttons to make
6 images change on screens.

7 This is the way they have learned a lot of
8 what they know, and it is the way that they entertain
9 themselves for hours on end.

10 So, here is a technology which they
11 resonate, and so, based on that, February 26th--this
12 is five or six years later--those students have
13 worked their way through high school.

14 They have formed themselves into what they
15 call the Young People's Project. They are about over
16 a hundred strong.

17 They work after school (inaudible) after
18 school workshops for themselves (inaudible) middle
19 school students.

20 On February 26, (inaudible) they will run
21 a workshop (inaudible) middle school, having
22 contracted themselves (inaudible) public school

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1 system to run a workshop on (inaudible) calculators
2 to prepare these middle school students who are in
3 algebra, for the statewide Algebra 1 test, because in
4 Mississippi, if you are in a class which is labeled
5 Algebra 1, then you have to take the statewide
6 Algebra 1 test.

7 So, these students are (inaudible) project
8 what we think of as the demand side of this education
9 problem. How are you going to get students to demand
10 that they should be educated when they are faced with
11 situations where there is a shortage of supply in
12 terms of the whole educational system (inaudible).

13 Actually, Mr. Amos here is from Washington
14 County (inaudible) some of the students from Simmons
15 will be bussed down to this workshop, which
16 (inaudible) February 26th (inaudible).

17 I do a long distance learning class with
18 some of the students at Simmons High School
19 (inaudible) Jackson, Mississippi.

20 Now, I followed some of our students from
21 8th grade at Brinkley Middle School into the high
22 school about five years ago.

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1 At that time, I was working in the 8th
2 grade Algebra 1 classes (inaudible) teacher. We had
3 about 120 students that year took Algebra 1 in the
4 8th grade.

5 This, in itself, has been a political
6 battle. (inaudible) Mr. Chavez's discussion. I am
7 not sure I (inaudible).

8 But, I thought I heard him say that they
9 are using the AP calculus as a motivational tool
10 (inaudible), so even though students get a 1 or a 2
11 on the AP exam, right, they are encouraged to take
12 that course.

13 This helps them when they get to college.

14 VOICE: Most definitely.

15 BOB MOSES: So, you are not using that
16 course as a gatekeeper. You are using that course as
17 a motivation tool to get kids in.

18 They are better off (inaudible) even if
19 they have to repeat that course, because they can't
20 get credit for it if they get a 1 or a 2 on the exam.

21 But, they are better off in college if
22 they have to repeat that course (inaudible) initial

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1 success (inaudible) experience with it.

2 VOICE: And if they start early, we have
3 several students in the BC class, which is basically
4 the second year of calculus.

5 So, they have two years the earlier
6 (inaudible).

7 BOB MOSES: (inaudible) Now, in
8 Mississippi, we have a really retrograde policy in
9 place now around (inaudible) equivalent way of
10 approaching Algebra 1 in the middle school.

11 The algebra project wanted to use Algebra
12 1 in the middle school like they are using with the
13 calculus making the transition from high school to
14 college.

15 That is, make this a motivational
16 (inaudible). Bring as many students (inaudible) that
17 you can and make them have a successful experience.

18 (inaudible) if they then have to do it
19 again in high school, they will still be better off
20 than if they do (inaudible) 8th grade math.

21 (inaudible) The statewide policy for
22 examining currently works against them, because it is

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1 the school system that gets graded on whether or not
2 they are doing a good job, okay?

3 All the high school students have to take
4 the exam, because they need Algebra 1 to graduate.

5 So, they look to the middle schools to
6 (inaudible) one or two classes in a given school.
7 They want as few students as they can get who are
8 going to get high grades at the Algebra 1 statewide
9 test to take Algebra 1 in the 8th grade, right?

10 So, there is an issue here, because we
11 talk about AP calculus (inaudible), but there is an
12 issue of (inaudible), right?

13 Where is everybody standing, and how do we
14 raise that floor, because the way to get all of our
15 students really looking to have an option, on the
16 other hand, is to have a floor that is high enough
17 for everybody to stand on so they can think that they
18 might have an option here (inaudible) course.

19 So, the algebra project in places where we
20 work, we are trying to work to find the floor. Now,
21 AP (inaudible), but the question is what is the
22 appropriate floor?

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1 (inaudible) appropriate floor is that all
2 of the students in the project should engage the
3 (inaudible) sequence (inaudible) high school.

4 This is really the only (inaudible) floor
5 for technology and economy (inaudible), and we think
6 of it as a citizenship (inaudible).

7 We think that the students who don't do
8 that will really not be positioned for citizenship.
9 It is not just a question of career.

10 (inaudible) just as reading and writing is
11 basic, that is, that math has moved to the point,
12 because of the shifts in technology, so that your
13 math literacy is as important for the democracy of
14 this country as reading and writing was in the
15 industrial ages.

16 You have shifted from a technology
17 (inaudible) manual labor, physical right (inaudible)
18 replaced physical work with technology, which is
19 (inaudible) your mind.

20 That is an enormous technological shift,
21 and it has brought a new literacy, which is the math
22 literacy (inaudible) technology crunches the numbers.

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1 So, you need people who can interpret the
2 information, which is partially encoded (inaudible)
3 quantitative.

4 So, you have to have a literate citizenry
5 to work this technology to have a democracy, and so
6 math literacy really is on the table just like
7 reading and writing was in the industrial age.

8 Now, AP courses (inaudible) ceiling,
9 right, but the real question is, if we are going to
10 get access to these courses, how do we (inaudible)
11 floor?

12 VOICE: Bob, thank you. That was great.
13 We are going to go right to Diana, and our AP
14 teacher. Then, we will have time for a little bit of
15 discussion.

16 (Pause.)

17 VOICES: (Simultaneous conversation.)

18 VOICES: (inaudible) Play?

19 VOICE: We had a parents' night at the
20 beginning of school, and AP parents' night to explain
21 to the parents what the scores are, that the average
22 school is on the bell curve, and it is a 3, and you

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1 are doing well.

2 Basically, the ten points that we have
3 added we have explained that to the parents, just
4 basically go over the whole program with the parents.

5 A lot of times, students-- We had one
6 student who was studying until 2:00 o'clock in the
7 morning, and the parent was saying this kid is losing
8 weight, and things of that nature.

9 (inaudible) cartoons. It shows six
10 frames, and there is a student kind of playing the
11 drums, has the book open.

12 Finally, in the last frame: I got an F on
13 the paper. What did you study? I studied for six
14 hours.

15 So, we talk about study skills, how to
16 budget your time, how to manage your time, how to
17 organize, very basic concepts that some of these
18 students don't have.

19 We have to take the initiative to help
20 them out in this way. In terms of demand, again,
21 once they hear about what you do with the course,
22 they want to sign up.

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1 VOICE: Rex, any thoughts? Any additional
2 thoughts on getting the students the demand?

3 REX BOLINGER: I hear what you are saying
4 about concerns over GPA, and if they don't get a
5 certain grade: Do I want to take those courses?

6 We tried to address some of that. We
7 weight all of our AP courses, so that helps some. I
8 think our focus seems to be: Give me lots and lots
9 more 3's. Give me the kids--

10 We have all got the kids that will get the
11 4's and 5's, but, as we are talking about, give me
12 more kids that will take the experience and push
13 that.

14 We also try to offer the incentive of that
15 that we work particularly with our freshmen
16 orientation when that group comes in, and show the
17 parents how your students can get virtually one year
18 of college under their belt almost tuition-free if
19 they start planning prior to freshman year, really.

20 We are talking about that in the middle
21 school, but those things have been an incentive, but
22 it is really raising that floor, as Bob talked about.

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1 We know what the ceiling is, but doing
2 away with general studies' courses and offering
3 algebra over four quarters--

4 You keep taking those quarters as you need
5 them, but you have to have that to graduate in a
6 class beyond that kind of thing.

7 I think it helps. It does, the whole
8 level.

9 VOICE: Thanks. Other questions? Right
10 here.

11 VOICE: I have a question for Diana on the
12 state department of education (inaudible) states-
13 funded gifted program, one of our requirements is
14 that the curriculum is differentiated (inaudible)
15 gifted kids.

16 So, what you said about wanting all these
17 kids to take advantage of your course (inaudible).
18 We hear that a lot, that they provide enrichment for
19 everybody (inaudible) everybody else.

20 We are saying you have got to
21 differentiate the instruction for your gifted kid.
22 How would you answer that (inaudible)?

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1 VOICE: Well, it is a problem, because
2 that was the only way I was even able to start an AP
3 course originally in my small school was with gifted
4 and talented state money.

5 We did have to screen kids three ways and
6 do all that stuff. We eventually abandoned that,
7 because we wanted to open it up to more kids.

8 I guess I would look at reexamining the
9 notion of gifted. What (inaudible) bars kids from an
10 AP English course is generally reading level, not
11 intellectual capacity but reading level.

12 Somewhere along the line, they haven't
13 learned to read, and so they-- When you do it this
14 way, they can--

15 I've got a kid, a special ed kid but he is
16 a second grade level reader. He doesn't write at
17 all, but he is the kid who asked me (inaudible), Ms.
18 Kraus, is Bill Clinton a tragic hero?

19 That was a great question. None of my
20 seniors asked me that question, and so I reiterate,
21 gifted is something that we need to be careful,
22 because I think we label kids--

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1 We label them in special ed too quickly,
2 and we label them gifted too quickly, and it creates
3 groups, and it creates exclusion.

4 I would like to see all that opened up.
5 AP shouldn't be just for gifted kids.

6 VOICE: I would like to hear some
7 strategies actually experienced by any of you in
8 dealing with teachers, parents.

9 I think everyone would agree (inaudible)
10 material is the way that everyone should be teaching
11 in the classroom (inaudible).

12 We agree that enabling and empowering
13 students to demand more of their curriculum is a good
14 thing philosophically.

15 But, I really need to hear more than just
16 bar graphs. I need to hear what you do-- Tell me
17 about a conversation you have had with a teacher who
18 has been dragging along a classroom over 25 years
19 waiting for retirement.

20 (inaudible) I need to hear real
21 strategies, not just programmatic (inaudible)

22 (inaudible) doesn't make an impact in

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1 making policies.

2 VOICE: I would like to take a quick shot
3 at that one, and then we will go from there. The
4 interaction between the student in the classroom
5 (inaudible).

6 We want the highest level professional
7 that we can have in that interaction. In our case,
8 it involved going to what I would determine as the--
9 in a staff of 54, the ten best examples of
10 professionalism and the kind of presentation you saw
11 here, and develop peer coaching teams around that
12 situation, and devise what we call 2+2 program, where
13 we bring substitutes into the building to cover
14 teachers during--when they have a tutoring period so
15 they can go out and watch other teachers teach.

16 I am convinced that it is within that kind
17 of a setting that we actually raise our expectations
18 and our skill level of teaching, where I could go in
19 and watch that on a daily basis by walking down the
20 hall rather than something else.

21 Beyond that, then, we are focused yearly
22 on setting those goals and looking at our student

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1 data on what our students are achieving and setting
2 personal goals around those things and working within
3 the building to facilitate those peer coaching teams.

4 VOICE: The state board of education has
5 three different types of diplomas. One of them is
6 the distinguished diploma, which says that you need
7 to take three upper advanced classes (inaudible) AP
8 and score a three or better to receive that credit.

9 That is definitely an incentive for those
10 students (inaudible) honors.

11 We bring in colleges and have them speak
12 to the parents and their admission committee, and I
13 specifically (inaudible) what do you look at besides
14 GPA in the interview?

15 I mean, what kind of courses are you
16 looking at? All the time, they say we look at the AP
17 courses. I say do you look at the grade? No. Look
18 at the score? No, we look at the fact that that
19 student took that course, and it is the content.

20 Teachers-- I had a teacher who--third
21 year teacher, very enthusiastic teacher. Finally, I
22 got her to do the government class (inaudible)

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1 unfortunately, because of some other problems.

2 She went to that week-long summer
3 institute, and she came back a changed person. She
4 knew what was expected of her.

5 She knew-- She saw other teachers in
6 various situations doing the same thing, getting by,
7 innovating, you know, motivating kids, trying
8 different things, using different strategies.

9 We gave her the opportunity to order the
10 materials (inaudible). The quality of her class has
11 changed 100 percent over the last two years.

12 I did several AP workshops, week-long
13 summer institutes for several years during my time in
14 teaching biology.

15 I saw groups of 30, 40 teachers. This is
16 prior to (inaudible) initiative for their AP IB
17 initiative.

18 In the crowd, we had some teachers
19 (inaudible) 25 years. You ain't' going to change
20 them. They ain't going to learn. How do you expect
21 us to do (inaudible) in the lab? I don't even have
22 enough money for blah, blah, blah, blah, blah, blah,

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1 blah.

2 Well, I started teaching the AP class my
3 first year in a room that had one electrical outlet,
4 and you do it.

5 When people talk to other teachers and
6 teachers are given the chance to dialogue and to talk
7 about some of the situations (inaudible), I feel that
8 that's the best time out for teachers, especially
9 during the summer when they are isolated from
10 everything else and they are there day and night.

11 They wake up. They talk about AP. I
12 mean, my God, what is a teacher's dream, spending the
13 whole week with a bunch--

14
15 (End Tape Side A.)

16 (Tape Side B.)

17
18
19 VOICE: It's not another workshop. We are
20 talking about content, which is what we want to set
21 forth.

22 VOICE: Bob? Bob, did you want to add

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1 something?

2 VOICE: There are two sets of populations
3 for our strategy. One is the students, and the other
4 the teachers.

5 Let me talk about the students first.
6 What has happened talking about the algebra project
7 now, which is spread (inaudible) country working in
8 different schools that are targeting minority
9 students, both in the inner city and rural.

10 I am talking about an evolutionary
11 process, so one strategy was to grow something,
12 right, not to try to impose something (inaudible).

13 So, I started with my own children as a
14 parent in '82 and went into my oldest daughter's
15 classroom where they weren't offering algebra and
16 taught her and some other students algebra, right?

17 That is how the project got started. Now,
18 my children are in their 20's, and two of them are
19 working full time in Mississippi.

20 One of them, my oldest son, really has
21 grown this group of young people, and he did
22 something that I couldn't do.

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1 He started when he had just come out of
2 college, and he was still in his early 20's. He made
3 it cool to stand up in front of young people and do
4 mathematics.

5 I could stand up in front of them and tell
6 them you should do mathematics, but I couldn't make
7 it cool, right?

8 (Laughter.)

9 VOICE: But, being a young person, he made
10 it cool for them to do that, right, and so you have
11 young people now who feel it is cool to stand up and
12 do that.

13 We took-- I just had a gig out at Deanza
14 College just this past weekend, which is a little
15 below San Francisco.

16 At thsi point now when I go out to do
17 these gigs, I take some students with me, and so we
18 had two 8th graders and my oldest daughter, who is in
19 her late 20's.

20 She was supervising them, and they went to
21 work in the algebra project (inaudible) school in San
22 Francisco (inaudible).

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1 They were teaching the students there
2 their math (inaudible). Well, they started out with
3 the prime number rap, right?

4 They have a little rap song, right, which
5 tells the prime numbers, right, and they had the kids
6 singing the prime number rap.

7 So, they have made it cool, right, to take
8 the hip-hop culture. That is the issue here. Can
9 you get this culture and move it into mathematics,
10 right, because there is nothing to say that we have
11 to do mathematics with European culture, right?

12 Prime numbers don't care whether you talk
13 about them in European culture or you talk about them
14 with the rap music, right? They couldn't care less.

15 (Laughter.)

16 VOICE: So, this is one of the strategies.
17 What we have seen now with the other strategy is to
18 develop the concept of a youth math literacy work,
19 that these are young people and they have work to do.

20 They have organized themselves, actually,
21 as a little business, and they run their little
22 business, and they actually went and contracted

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1 themselves with the Jackson public school system to
2 do the workshops.

3 So, they have ownership over this, so that
4 is another strategy.

5 The question for the kids has got to be,
6 well, what's for me in this math? It can't be what's
7 for me ten years down the road.

8 They can't see ten years down the road, so
9 what is it for me now in this math? So, there is a
10 strategy to take this concept and math literacy
11 workers and move it like sports.

12 You have got to practice like you practice
13 sports. You've got to perform like you perform in
14 sports. You've got to get up in front of an audience
15 of your peers and perform, right, make a demand on
16 them.

17 So, there is a strategy here, I mean, to
18 make this happen, because I don't see in the teaching
19 side of this deal where we are going to get the
20 resources (inaudible).

21 I mean, we haven't even got an agreement
22 at the university level that the education people

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1 should sit down at the same table with the math
2 department and work out a strategy around how you are
3 going to prepare math teachers.

4 We don't have that across this country,
5 so, with the young people, at least you have a
6 strategy which says, well, here are some resources
7 that could be tapped.

8 If you can find how to tap them, you might
9 move some of the resources eventually.

10 So, they move their parents. The young
11 kids move their parents, so, if you get them
12 involved, you bring the parents in with them.

13 So, that is the other part of the strategy
14 about parents, but this happens-- The school is the
15 place where we are recruiting.

16 But, then the activity, even if it takes
17 place in a school building, is happening outside of
18 the regular school context.

19 It is the kids who are running and doing
20 things. On the teachers' side, the strategy is to
21 try to professionalize teaching.

22 Teaching is just not a profession the way

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1 that medicine, or so forth. Teachers just don't have
2 a kind of (inaudible) control over their profession,
3 the way that--

4 So, one thing we try to do in the algebra
5 project is create some kind of avenues so that
6 teachers can really get some more control through
7 training teachers to train other teachers, and so
8 forth.

9 So, we have a train the trainer program,
10 which is driven by teachers who have risen through
11 the program, and they begin to experience themselves
12 at a policy level about what to do about the
13 problems.

14 VOICE: Thank you so much, Bob. I am so
15 sorry that our time is up. I want to thank the
16 panelists. You did a great job, and you are doing
17 great work at home.

18 Thank all of you for coming, and I have
19 got some pamphlets here about numerical in high
20 schools, a little advertising that I am going to
21 bring around the tables real quickly before you
22 leave.

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1 But, thank you so much, and it is time for
2 a little break, and then next session--

3 (Applause.)

4

5 (End Tape Side B.)

6

7 TAPE 2

8

9 (Tape Side A.)

10 Tape side begins mid-sentence.

11

12 VOICE: --Education here in Washington,
13 and I am the Director of something called the New
14 American High Schools Initiative.

15 I left little red, white, and blue
16 pamphlets on your tables, so you can take that with
17 you and take a look at that when you have time.

18 Please visit our Web site. I want to
19 leave all the time for our panelists, because they
20 are so good, so I am not going to talk a lot about
21 New American High Schools.

22 But, it is a terrific kind of ground-

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1 breaking initiative that has really spurred a lot of
2 interest, both within the Department and nationally
3 around high school reform issues.

4 I am fortunate enough to be able to
5 moderate this panel. It is a very easy job, because
6 they do all the work.

7 I am going to introduce you to our
8 panelists and get started. At my far left is Bob
9 Moses, who is the founder and President of the
10 Algebra Project.

11 I said before he was from Mississippi. He
12 is not. The project is based in Mississippi. He is
13 from Cambridge, Massachusetts.

14 To Bob's right is Rex Bolinger, who is the
15 Principal of Angola High School in Angola, Indiana.

16 To Rex's right is Phil Chavez, who is the
17 Assistant Principal at Southside High School in San
18 Antonio, Texas.

19 Last but not least is Diana Kraus, who is
20 an AP English teacher at Mount Ararat High School. I
21 am going to say Brunswick, and it is not. It is
22 Tomson, Maine.

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1 So, we are going to start off with Phil.
2 Each of our presenters is going to take about ten
3 minutes to give you an overview of the work that they
4 are doing, some of the successes that they have had--
5 lots of successes with incorporating AP coursework
6 into their curriculum at their schools, some of the
7 pitfalls and problems that they faced.

8 Then, we will open this up for discussion.
9 If you do have a quick question while the presenter
10 is up, certainly feel free to ask.

11 PHIL CHAVEZ: I taught AP Biology for 13
12 years, and I am used to the (inaudible). Let me tell
13 you about Southside High School.

14 We are a small rural school located in the
15 southern apex of San Antonio. We have (inaudible)
16 Southside (inaudible) square miles inside the city
17 but a very poor area called (inaudible).

18 Basically, I guess, to give you an
19 example, (inaudible) about eight or nine years ago.
20 All rivers run south, so basically they have a lot of
21 sewage treatment plants (inaudible) area.

22 (inaudible) We don't have much revenue.

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1 There's shopping centers (inaudible) municipal areas.

2 Basically, let me give you a little
3 breakdown of our students. Seventy-seven (77)
4 percent of our students are low socioeconomic
5 (inaudible); 81 percent of our students are Hispanic.

6 Last year, we had 75 percent of our
7 students go on to college. (inaudible) a follow-up
8 study that we have done with some of these students.

9 Currently, the AP courses that we offer,
10 biology, physics B and C (inaudible), calculus
11 (inaudible), calculus BC, English literature,
12 (inaudible) studio art, Spanish language. It should
13 be Spanish literature.

14 (inaudible) Spanish. Several years ago,
15 we started an AP program. Basically, we only had, I
16 would say, 550 students back then.

17 Only 20 students took the SAT (inaudible).
18 They are not going to go on to college (inaudible),
19 not so much the kids.

20 So, we had to change that, so we brought
21 in AP (inaudible) school. Spanish AP (inaudible)
22 fortunately we had a gentleman by the name of

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1 (inaudible) principal (inaudible).

2 Strangely enough, a majority of our
3 students scored 4 and 5. Wow. (inaudible) rise to
4 meet the expectations.

5 Next year, we are going to implement
6 government, economics, (inaudible), music theory,
7 statistics (inaudible), computer science (inaudible),
8 which we used to offer a couple of years ago
9 (inaudible) chemistry.

10 (inaudible) I guess the major component
11 that a school has to do in order to get (inaudible)
12 is to look at (inaudible)

13 (inaudible) mindset that you are going to
14 provide challenging courses for all your students,
15 and also with that academic excellence, you are going
16 to have to ensure student success.

17 That means you are going to have to help
18 them. You are going to have to help them after
19 school. You are going to have to help them before
20 school.

21 Around test time, perhaps a month before,
22 you might have to give a whole weekend and do weekend

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1 type things at home.

2 These are the types of things that our
3 teachers do with our students. Our students come to
4 school (inaudible) with a lot of things on their
5 minds.

6 They come with extra luggage, if you will,
7 of what happened the night before, living conditions,
8 food, and things of that nature.

9 Several of our students have some problems
10 at home. (inaudible) expected to perform, so there
11 are also other kinds of counseling services that we
12 offer for our students across (inaudible).

13 (inaudible) department chairs initially
14 and the counselors, and basically we have to look at
15 offering effective teaching strand in each
16 discipline.

17 That doesn't mean that (inaudible) offer
18 AP Biology. Last year, you took chemistry
19 (inaudible) physical science.

20 Boom. Here you are in AP Biology class
21 doing college level work using a computer assisted
22 graphics to graph data.

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1 (inaudible) These kinds of skills, if you
2 will, need to be brought down in the 9th, 10th, 11th
3 grades, and even further down and extended down to
4 the 6th, 7th, and 8th grades.

5 (inaudible) We look at the AP course
6 being the capstone course for that particular strand.
7 Now, it is very important that you have a goal set up
8 what is going to happen later on, because, when
9 teachers go back (inaudible) analyze their curriculum
10 6 through 12--you talk about vertical teaming--there
11 is a lot of repetition, a lot of teaching of the same
12 concepts, again, and certain topics.

13 So, it is very important that teachers are
14 given time to dialogue. Many times, they are inside
15 their classroom and they are expected to teach, and
16 there is always a lot of finger-pointing: Well, down
17 at the middle school (inaudible).

18 Well, it is very interesting when you get
19 the high school and middle school together, because
20 it is very productive. A very productive thing
21 results.

22 Master schedule -- working on the master

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1 schedule. Be sure that you allow students to take
2 these courses.

3 Now, in small rural schools where the
4 focus of the entire community is the high school or
5 the school campus, there is other things that get in
6 the way.

7 There's athletics in Texas (inaudible)
8 football. (inaudible) There's athletics. There's
9 band. There's other ROTC, other things to take the
10 students away.

11 We currently have what is called an AP
12 modified block schedule. (inaudible) one of those
13 ambivalent words. What's block?

14 (inaudible) every other day. In many
15 cases, we will combine two courses to offer
16 throughout the year. In some cases, we might offer a
17 course everyday (inaudible) calculus (inaudible).

18 They are offered everyday for 90 minutes.
19 We had done that initially with our English, but the
20 English teacher came back and said: I am not
21 comfortable with this every day; 90 minutes every day
22 would be fine.

1 Great. So, we fixed the master schedule
2 accordingly. (inaudible) courses like AP calculus
3 and AP physics.

4 Some of these things might be (inaudible)
5 look for in small school. (inaudible) ten of these
6 things, and we have to make sure that everybody
7 (inaudible).

8 (inaudible) vertical teaming -- last
9 (inaudible) middle school. It is very much alike
10 what we have in middle schools.

11 (inaudible) vertical teaming through the
12 10th grade, but as administration changes, boards of
13 education change, and we had (inaudible) next year in
14 the 9th grade.

15 We find that our attendance rate improves.
16 We used to have a very high number of students
17 missing school in 9th grade and 12th grade.

18 (inaudible) more frequently after the
19 teaming. (inaudible) Also, their GPA (inaudible)
20 more successful. We had less students failing.

21 One big problem that we have--I don't know
22 if it is unique to our school, or what. But, our

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1 teachers are kind of reluctant to call parents.

2 First of all, we have a lot of migration
3 between (inaudible). I think we had 300 people come
4 and go (inaudible). That's quite a bit, 30 percent
5 of the population since August.

6 Sometimes phone numbers (inaudible), so we
7 don't have-- There is always an excuse (inaudible).
8 (inaudible) four teachers that met with parents.

9 I never attended so many parent
10 (inaudible) as I did when we had teaming, because the
11 teachers were more encouraged to call the parents.

12 (inaudible) recruitment into AP
13 (inaudible) 1000 students, you are looking at a
14 certain number of students that are going to be
15 taking, as I said, bank, AP physics, AP English.

16 Okay, how do you lure these guys in?
17 Well, it has been my experience that you allow
18 students to come into AP courses with little
19 resistance, okay?

20 You don't have many barriers to enter the
21 AP course, because the students are aware (inaudible)
22 class. The word gets out.

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1 Not only does it get it, but it is
2 rigorous. It is kind of fun. They really enjoy it.
3 They enjoy challenge.

4 So, I find that the students in the AP
5 class are students who have taken an AP class are the
6 best recruiters to get people into the AP courses.

7 We have an electives fair (inaudible)
8 where every teacher comes down and has a little
9 booth. We bring up the 8th graders to show them
10 (inaudible) courses.

11 Of course, we allow our 9th, 10th, 11th
12 graders to come in and talk to the AP teachers, and
13 that way they pass out a course syllabus, course
14 description, and (inaudible).

15 In conjunction with this, we have an
16 alumni day. Most of our students-- A majority of
17 our students are going to be first-time graduates
18 from high school, okay, the population we are dealing
19 with.

20 You know, there is not a lot of
21 encouragement
22 to-- There is a lot of encouragement to be the first

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1 one in the family to graduate, but there is not a lot
2 of encouragement to go past that.

3 We bring back alumni students, and I tell
4 you the greatest effect (inaudible) least number of
5 years (inaudible).

6 (inaudible) are great, because they know
7 that group (inaudible), but we bring back people who
8 have graduated from graduate school who have taken AP
9 courses.

10 They talk about the (inaudible) transition
11 from high school to college and what best helped them
12 (inaudible).

13 They talk about the AP course that I took
14 with so and so, and we did this, and this is what we
15 did in college.

16 That, ladies and gentlemen, (inaudible)
17 11th or 10th graders just glued. You can hear a pin
18 drop, so it is quite invigorating that we have this
19 opportunity to bring back our students (inaudible).

20 Of course, we bring them back in December
21 when they are off from their college break, and we
22 also try to schedule some stuff around Spring break,

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1 because that is when students are registering for
2 their courses for the following year.

3 (inaudible) AP summer institutes -- I was
4 a presenter at several AP week-long institutes for
5 several years--about six or seven years (inaudible)
6 New Mexico and Oklahoma.

7 Nothing is better for these teachers.
8 (inaudible) Advanced Placement and spend an entire
9 week. I mean, what could be better (inaudible)

10 (inaudible) spend a whole week with other
11 biology teachers talking about biology. It is great.
12 (inaudible) 8:00 o'clock in the morning.

13 A lot of people would come back after
14 dinner to look at a lab--to get the results of
15 (inaudible) from 6:00 until 8:00 and 9:00 o'clock at
16 night.

17 I mean, it was great. I have seen
18 teachers (inaudible) principal sent me. With that
19 kind of attitude, at the end of the week they are
20 invigorated.

21 They have taught for 25 years (inaudible)
22 invigorated in these AP workshops.

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1 The state of Texas allows a reimbursement
2 of \$450 per AP institute if the teacher is going to
3 teach this institute for the first time the following
4 year.

5 This past year, I sent seven or eight--I
6 can't remember. But, out of that group, three of
7 them were not going to teach an AP class the
8 following year, but they were teaching our AP
9 classes.

10 (inaudible) teachers (inaudible) pre-AP
11 class. Well, what does that do to a teacher if you
12 have one calculus class or one AP class?

13 Well, they have four or five other classes
14 in that discipline. Time and time again, they have
15 come back with these ideas and the level of
16 expectation (inaudible) in every class they teach.

17 (inaudible) past summer was the best way
18 for you to spend your money (inaudible) Learn about
19 AP, they find out that they are not the only one that
20 doesn't have (inaudible).

21 (inaudible) lab. They get ideas, so,
22 again, giving teachers time to dialogue and to talk

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1 about their discipline is very good.

2 (inaudible) In addition to the fee
3 waivers offered by the College Board and the fee
4 waiver that a school may forego, (inaudible) covers
5 \$30 of each exam.

6 Francis Brown (inaudible). For students
7 who (inaudible). Well, prior to all this, before we
8 had (inaudible) pay for these exams, we, at the
9 school, absorbed all costs of the exams.

10 (inaudible) \$5000, \$6000, \$7000
11 (inaudible). We had so many at the time.

12 Budgets -- there are some AP books in
13 biology that are adopted, and calculus, that are on
14 the recommended reading list for AP, that are adopted
15 by the state of Texas.

16 But, it may vary. You know, teachers like
17 to use the book that they have had before (inaudible)
18 really like this material.

19 A lot of times (inaudible) something of
20 that nature or additional material in science
21 (inaudible).

22 We provide (inaudible) for all of our

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1 freshmen, all of our sophomores, (inaudible) 11th and
2 12th, so all the students in the 9th grade learn how
3 to work a TI-83.

4 We currently use the (inaudible)
5 curriculum (inaudible) Western Michigan University by
6 a grant out of National Science Foundation
7 (inaudible) use these calculators to learn
8 (inaudible) mathematics.

9 (inaudible) but they are given data, and
10 they are supposed to manipulate that data and then
11 provide their equations.

12 Satellite AP -- Ball State University
13 offers a satellite course for Advanced Placement. I
14 didn't know how students were going to respond to
15 this.

16 I thought looking at a T.V. was going to
17 be very boring, but they love it. Again, I think it
18 may be just that they are used to it. They have
19 grown up with it.

20 So, there is a lot of interaction. Next
21 year, we are going to set up a two-way video
22 conference lab with our (inaudible) grant

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1 (inaudible).

2 (inaudible) so we can have real time
3 instruction. Finally, the (inaudible) teaming.
4 Again, the same concept that we have in middle
5 schools.

6 Let me go on to the summer school. We
7 have always offered pre-calculus for students who
8 want to take pre-calculus during the summer.

9 It is offered by our calculus and our AP
10 calculus teacher. This is his project. It has been
11 his project for the last eight years.

12 We have a large number of students
13 enrolled, so they have pre-calculus during the
14 summer, and they (inaudible) the following year.

15 Basically, he has them for (inaudible)
16 school. We are going to try this with our Algebra 2
17 teacher (inaudible) teaches pre-calculus, to offer
18 the Algebra 2.

19 (inaudible) a little bit more time with
20 calculus and pre-calculus courses. The last thing is
21 we offer an incentive for GPAs, and additional ten
22 points for students who take an AP class.

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1 That's always a concern (inaudible) much
2 more difficult class (inaudible) courses. Okay. I
3 can stay up here with a lot more stuff--

4 VOICE: No, you cannot. No, that was
5 great, Phil. Thank you so much, and Phil does have
6 hand-outs, and now we are going to go to Rex from the
7 midwest.

8 (Pause.)

9 REX BOLINGER: Phil is helping me pass out
10 some things about our school (inaudible). I am going
11 to have you keep in mind what Phil just said to you.

12 I am going to take a little different
13 approach on things that have happened in our schools,
14 and some things I think haven't happened (inaudible)
15 regardless if it is AP or any part of your school.

16 You may not have enough of these per
17 table, but, if you can share a bit, and if you would
18 like one I can get you my card, and (inaudible) get
19 it to you.

20 Could I see a show of hands for how many
21 are AP teachers in here? All right (inaudible)
22 Department of Ed folks? (inaudible) people? Others?

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1 Who are you?

2 Just tell me--

3 VOICE: Central office.

4 VOICE: State department.

5 REX BOLINGER: State department. Okay,
6 thank you.

7 VOICE: University (inaudible).

8 REX BOLINGER: University. Fine, okay.

9 VOICES: (Simultaneous conversation.)

10 REX BOLINGER: It helps me frame a little
11 bit what I would like to say to you (inaudible). I
12 believe that you can't simply say we are going to
13 begin offering AP (inaudible)

14 (inaudible) offer more things (inaudible)
15 think that we are going to have kids show up for
16 those classes. We have got to start (inaudible)
17 elementary levels.

18 We heard Dr. Munroe yesterday talk about
19 setting those expectations, and so forth, and frankly
20 I look at the high school (inaudible) evolution, if
21 you will, over the last several decades and think how
22 are we going to expect anything different unless we

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1 change this organization?

2 We know a lot about how kids learn. We
3 know a lot about effective teaching. We know a lot
4 from the research about how to raise test scores.

5 But, yet, do we provide a vehicle for that
6 to happen? If the stand now is that all kids
7 succeed, not just the 50 percent that did in 1950 but
8 all kids, I am convinced that my vision and the
9 vision of many high school principals in this nation
10 is that it is going to include partnerships and it is
11 going to be dramatically affected by technology.

12 Now, after having said that, in Angola
13 High School ten years ago we started working a lot
14 with how to improve interaction with kids and
15 teachers, improving teaching strategies, what we know
16 about how kids learn (inaudible), and all those
17 things.

18 But, it wasn't until we decided to
19 restructure our day we felt that we could start
20 incorporating some of those in the classroom
21 (inaudible).

22 We get a number of visitors to our school,

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1 and frankly I like to keep data on everything
2 (inaudible) number to.

3 I will just show you one thing within that
4 report from about (inaudible) bar graphs and things
5 like that.

6 Some people like them. Some don't. I am
7 simply saying that I have to have them to communicate
8 to my public and others how we are doing.

9 I can only compare ourselves to ourselves.
10 We are a rural school in rural Indiana with about
11 three percent minority and lots of diversity in
12 socioeconomic status.

13 So, as a result, I have to compare where
14 we have been and where we are going, and I want to
15 improve that.

16 The blue bars show where we were
17 (inaudible) baseline prior to moving to flexible
18 scheduling in Angola High School.

19 Some people would say that we are on a
20 four block schedule. I don't like to say that,
21 because (inaudible) people's minds about, oh, I know
22 that won't work (inaudible).

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1 (inaudible) work for you (inaudible)
2 suggests that high schools should look at ways where
3 you break down the teacher load.

4 Instead of teachers (inaudible) 150 kids
5 in a teaching (inaudible) semester, break that down.
6 There are several schedules that do that.

7 Give kids an opportunity to repeat courses
8 in a year if they need to and still (inaudible)
9 graduation.

10 Or, in our case, (inaudible) better
11 statistics in our SATs, our AP scores, and ACT scores
12 simply because we are having more kids taking higher
13 level courses sooner.

14 Kids can take algebra and geometry in one
15 year in our school, and many do, and we let them fly.
16 We don't hold them back.

17 My traditional schedule is holding them
18 back. You can only take one math course a year,
19 because that is juggling six or seven other things,
20 that is all you can do.

21 We have kids taking lots of those things.
22 What are we going to do with them when they become

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1 juniors and they finish AP Calculus?

2 That was our challenge, so we went to a
3 partnership. Fortunately, in my community, we have a
4 small, private college of 2000 students.

5 It is an engineering school (inaudible)
6 small, but it is there. It's good, and we link with
7 them in three of our AP courses where, when kids
8 finish our AP courses, they can move into their more
9 advanced chemistry, AP literature--English
10 literature--and also calculus.

11 The nice thing about that for us is that,
12 if we work with them for about three years--
13 Sometimes higher education folks are strange breeds
14 of people.

15 But, we sat down with them for about a
16 year working on a monthly basis to the point where
17 they are seeing--

18 By the way, their enrollment has increased
19 about 20 percent since they started working with
20 local high schools.

21 We are one of four rural high schools
22 around them, and I am going to talk about that

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1 partnership in just a moment.

2 But, they started by sending professors to
3 our campus. Now, our kids are going to them, and
4 they have changed their schedule to match our high
5 school schedule for their students and ours
6 (inaudible).

7 (inaudible) The three rural schools
8 around us are (inaudible) Demographics suggests that
9 we will stay pretty stable for the next few years.

10 But, the schools around us about ten miles
11 away have anywhere from 350 to 500 students and offer
12 no AP courses.

13 So, we partner with them, and they send us
14 about three or four kids to our schools, and what we
15 are working on now, through the potential of some of
16 these grants (inaudible) is to come up with a
17 structure where we will start offering things
18 (inaudible) in those schools that we don't offer to
19 our kids (inaudible).

20 We have a pretty nice partnership
21 (inaudible) breaking down the anonymity in the large
22 schools (inaudible) 850 (inaudible) category.

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1 This is our approach rather than, in some
2 areas, one county school of 2000 kids, and we have
3 (inaudible) programs. Let's partner with them.

4 The big piece for us is-- We heard
5 Richard Riley say the high schools of the future have
6 to become the launching pad for students (inaudible)
7 experiences (inaudible) experiences back (inaudible)
8 make sense to them.

9 (inaudible) that I think that kids will
10 continue to raise the bar is if it makes sense in
11 their minds. If we send 160 kids a year out into
12 nine week one hour or two hour--one to two hour
13 (inaudible) community (inaudible) we call it
14 (inaudible).

15 (inaudible) industries and businesses have
16 to develop a curriculum, and those students can go
17 there for one of our classes, just like they would
18 elect any other class.

19 (inaudible) amazed at how they are making
20 connections on why it is important to take higher
21 level courses.

22 It doesn't take long working with a

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1 quality control person (inaudible) one senior say
2 this is where I want to be.

3 Her classmates looked at her (inaudible)
4 what is quality control? They had no clue, either
5 (inaudible) nine weeks (inaudible) working with that
6 type of person (inaudible).

7 So, anyway, it is a bigger picture than
8 just how you get to AP. I think it is incredibly
9 changing the whole school. And how you deliver
10 things.

11 Then, these things come along (inaudible)
12 ceiling, if you will (inaudible).

13 VOICE: Thank you so much, Rex. Bob
14 Moses.

15 BOB MOSES: How is everybody? I would
16 like to tell you a story (inaudible) background
17 (inaudible). About two years ago, Columbia
18 University held what they are calling their Skylight
19 Teacher Education Conference in New York at the
20 Marriott Hotel.

21 I was asked to come to do a workshop, so I
22 do my work in Jackson, Mississippi. I don't live

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1 there. I live in Cambridge.

2 So, I asked them if I could bring someone,
3 so I took the teacher (inaudible) 6th grade teacher
4 in the algebra project at Brinkley Middle School, and
5 a graduate of that school who is in high school to
6 present.

7 The three of us presented to the people
8 that came to the workshop, and after the workshop
9 some administrators from a school district right
10 outside Washington, D.C. came up and said that they--

11
12 They were really taken by the student and
13 his presentation, and said that they would like to
14 have him or some other student come and present to
15 the (inaudible).

16 So, we talked back and forth and worked
17 out a deal where, a year ago last Fall, we took 25
18 students up to this school system-- What's? It is
19 right outside D.C., somewhere--

20 VOICE: Chevy Chase.

21 BOB MOSES: North and west of D.C.

22 VOICE: Montgomery County?

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1 BOB MOSES: Montgomery County. They did a
2 workshop for about 125 teachers. (inaudible) all day
3 in different workshops.

4 They showed the teachers their different
5 things that they do with the graphic calculator and
6 other what we call algebra project (inaudible).

7 It is a concept that we have grown within
8 the algebra project of (inaudible) literacy work that
9 young people learn something well enough so that they
10 can teach it to their peers, or in this case, also
11 teachers.

12 Then, how this came about in the project,
13 and for me it is a central strategy of where are we
14 going to find the resources to actually tackle this
15 issue (inaudible).

16 What we are dealing with is what we call
17 the floor, right. The AP courses, I think of in my
18 mind, as a ceiling (inaudible) highest level is high
19 school courses.

20 But, we are really trying to define what
21 we think is an appropriate floor for every student
22 (inaudible).

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1 We have various criteria for why that is
2 an issue for students, but in 1982 as a parent, I
3 went into my oldest child's 8th grade math class and
4 taught her algebra because, in Martin Luther King
5 School (inaudible) Cambridge, they didn't have a
6 teacher in her (inaudible).

7 Her 8th grade teacher didn't know
8 (inaudible). My job in the family had been to do
9 math with our children. We have four children.

10 So, of course, (inaudible) the years I
11 have been working with my oldest daughter, and she
12 was ready to do algebra.

13 So, she didn't want to do two maths--my
14 math, the school's math. I said: Well, you do my
15 math in school.

16 (Laughter.)

17 BOB MOSES: So, I went into her classroom
18 and actually taught her and three other students
19 math, and that is how we started this algebra
20 project, which is not (inaudible) country.

21 But, the issue for us was how do you
22 establish a floor for inner city and rural students

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1 appropriate to the technologies that they have to
2 grow up with.

3 This computer revolution (inaudible) math
4 literacy tool for citizenship, just as surely as
5 reading and writing was needed for citizenship
6 (inaudible).

7 So, it is beyond career for us.
8 (inaudible) Who are going to be the citizens of this
9 (inaudible).

10 So, what (inaudible) 18 years have passed.
11 My oldest daughter worked with us in Mississippi
12 (inaudible) oldest son.

13 They have organized young people there
14 into what they call the Young People's Project. They
15 have over a hundred students.

16 They are in high school and middle school,
17 and they offer work after school and on Saturdays
18 around various math activities.

19 So, for me, this issue about (inaudible)
20 important, I teach actually six courses that I teach
21 (inaudible) High School in Jackson, Mississippi.
22 This is my fourth year teaching (inaudible) school.

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1 I got to the high school by following some
2 of our students in the middle school who had
3 completed Algebra 1 and tried to make a soft landing
4 for them at the high school level.

5 What we used with them in geometry was the
6 TI-92. I don't know if you are familiar with that
7 hand-held computer, but we used that to drive a
8 geometry class for the 9th and 10th graders who were
9 coming out of the middle school into the high school.

10 We have seen a bulge in the number of
11 students who are taking Algebra 2, Trigonometry
12 (inaudible) but that school has never had an AP
13 (inaudible).

14 It has never had (inaudible). They have a
15 thousand kids there. They are all black, and maybe
16 one white student one year or another that filters
17 through the school.

18 As I looked at this town (inaudible)
19 segregated (inaudible) Hispanic (inaudible) white
20 (inaudible) black.

21 But, for the small black schools, I doubt-
22 - I mean, I would like to know if there is one small

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1 all-black school around the country that (inaudible).

2 Maybe some black students (inaudible) in
3 the cities, but you deal (inaudible). Let me just
4 give an example of what you are dealing with.

5 About 1994--about six years ago--we
6 offered-- We had Theo Edwards from Fairville come
7 over and do a (inaudible) for about 30 middle school
8 teachers.

9 But, the following year, there wasn't one
10 of those teachers that felt comfortable enough to do
11 the graphic calculator in their classes.

12 What we did was ask Theo to let us have
13 some middle school students in the workshop, and
14 that's where it clicked in our minds, because those
15 kids took to it like ducks to water.

16 They became leaders in their classrooms,
17 and that is where we got the idea that, well, we can
18 start these kids (inaudible).

19 This is their technology. They are a
20 generation that has grown up (inaudible) buttons,
21 making the images move on the screen.

22 They think that the graphic calculator is

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1 worthy of their attention. There isn't one student
2 that will get up and open up a math book, and tell
3 the other students: Look, I don't know anything else
4 about this book, but I know what is written on this
5 page, and I want to explain to you what's written on
6 this page, but don't ask me what's on the next page.

7 But, they will get up in front of students
8 with a graphic calculator and say: Hey, I know
9 (inaudible) button. I know about (inaudible), and I
10 know what goes on and functions in this button, and,
11 while I haven't learned the rest of it-- They are
12 confident that they will be able (inaudible).

13 So, if they are willing to get up in front
14 of their peers and talk about this technology-- So,
15 I think that Rex is right on track when he says that
16 one of the keys to all of this is this technology,
17 getting this technology (inaudible).

18 So, that is our story. We are working on
19 the floor here. How do you get a floor under all of
20 our students for all of them to stand on?

21 We say, in the algebra project, that the
22 appropriate floor for algebra project students is

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1 that they gauge and be successful in the college prep
2 math curriculum, whatever that looks like in whatever
3 school they are in.

4 That is not a key to college prep. It is
5 not a key, but it is a floor from which you can begin
6 to figure that you have a chance to pull students
7 into AP courses.

8 That is where we are. Thank you.

9 VOICE: Thank you so much, Bob. Now--
10 No, we are not done. You can clap for him if you
11 want to. Diana Kraus, our AP English teacher from
12 Maine.

13 So, I hope you are all alert, because this
14 is-- Everybody here, I think, has taught, but Diana
15 is still a teacher.

16 (Pause.)

17 VOICES: (Simultaneous conversation.)

18 VOICES: (inaudible) Play.

19

20 (End Tape Side A.)

21 (Tape Side B.)

22

1 VOICE: Yes, it is. We-- When we look at
2 this and we talk a lot in this conference about
3 raising the standard and how do you get there, I look
4 at it as these whole connections of how do you get
5 more kids in the college, and how that happens and
6 whatever the partnerships can be.

7 We have often thought about our AP scores
8 can be quite skewed, because five of the top kids in
9 our class last year did not sit for the exam but got
10 full rides to colleges--two to the University of
11 Houston--and chose not to sit because of experiences
12 they had had with Tri-State University and those
13 credits.

14 But, we have got them there. Others that
15 do that and choose to sit for the exam, we feel, do
16 better. It becomes sort of a choice.

17 But, we only partner with Tri-State
18 University on three of the seven exams that we give,
19 so what we have done is figured out a way to, in our
20 type of schedule, address that gap, if you will.

21 We don't want our AP courses to conclude
22 in January, for example, and then have the gap until

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1 May before the exam.

2 We just know the kids-- There will be
3 some adjustment in those scores simply because of
4 that gap, so Tri-State has been one way of connecting
5 that gap in that students move from our courses
6 directly into their higher level courses and continue
7 in chemistry or calculus, or whatever that may be.

8 Therein lies the options that the students
9 have. Frankly, Tri-State loves those kids, because
10 they are the top of their courses that they get, and
11 so forth.

12 They reward them, both in tuition and
13 scores in transcripts, and that is good for kids, so
14 we say fine.

15 In the other courses, we have devoted
16 three of our quarters to AP rather than just two, and
17 we saw some statistics from ETS that suggested that
18 kids on schedules like ours do better if they have
19 that.

20 I know of other schools in our area
21 (inaudible) all types of schedules that run what is
22 referred to as skinnies through the whole schedule.

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1 (inaudible) block 2 AP courses together,
2 for example, and run them the whole year, again
3 addressing the gap.

4 So, I believe that you can take the
5 schedule that works well for most kids and adapt
6 things, so music works, so that drama works, so that
7 journalism works, so that AP works.

8 That is what we have tried to do.

9 VOICE: I would like to address something
10 regarding the block. I know there is a question
11 about one-semester courses or courses that are taught
12 for one semester.

13 In Texas, economics and government are
14 one-semester courses, so we are always dealing with
15 that gap. Next year, we are going to implement a
16 course where the second semester, they are going to
17 meet--

18 I'm sorry. We have eight periods
19 (inaudible) modified block 4 periods a day, first to
20 fourth, fifth through eighth, and they are 90 minutes
21 long.

22 We are going to start next year where, in

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1 the Spring semester, we are going to pair economics
2 and government and meet everyday.

3 That way, they get the course, and the
4 course will end together in May.

5 VOICE: Thanks, Phil. Other questions?
6 Yes, ma'am.

7 VOICE: Some of the schools that you
8 talked about still have (inaudible) students, but we
9 do have some schools in Michigan that there is maybe
10 one teacher that teaches all the science classes, or
11 one teacher (inaudible) classes.

12 Do you have any examples, or anybody in
13 the room, of places where, in a rural setting, when
14 you only have one or two teachers (inaudible)
15 satellite and online courses?

16 VOICE: (inaudible)

17 VOICE: I know one thing we saw in
18 northern Maine a few years ago (inaudible) is that,
19 in that situation, the school teaches its regular
20 course (inaudible) you might not even have advanced
21 biology courses.

22 (inaudible) a way you can handle that is

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1 to have an extra activity for the three or four kids
2 who are told in advance are going (inaudible).

3 A key to it is that you are collaborating
4 with four or five other school (inaudible) set up to
5 pick up three kids in one district, one in another
6 district, five in another district.

7 Then, all of those get bundled
8 (inaudible), so it is kind of a multidisciplinary
9 (inaudible) university approach.

10 Obviously (inaudible) extra time for
11 everybody involved, because the way (inaudible).

12 VOICE: Thanks. Rex, I am sorry. Were
13 you going to add anything on that note?

14 REX BOLINGER: You can go ahead.

15 VOICE: Okay. Other questions from the
16 audience. People maybe are tired and hungry. Yes,
17 ma'am.

18 VOICE: (inaudible) compacted summer
19 activity. We think this might encourage students to
20 take an AP class that they might not take
21 (inaudible).

22 (inaudible) problem, and this way you

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1 could have the high school students have maybe
2 community college professors teach in the classes.

3 In the rural schools, we have, like you
4 said, a lot of trouble getting people who want to do
5 that (inaudible).

6 It seems like these kids maybe don't need
7 15 weeks sometimes.

8 VOICE: Anybody?

9 VOICE: I haven't, but I like that
10 thought.

11 VOICE: (inaudible).

12 VOICE: Where is that?

13 VOICE: Department of Education in
14 Indiana.

15 VOICE: Great. I was going to ask if
16 there were any Indiana folks here, and I was going to
17 sit down and let you talk.

18 VOICE: (inaudible).

19 VOICE: The question--

20 VOICE: The question was has anybody
21 thought of offering AP courses in accelerated summer
22 types of activities, where we might be able to get

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1 some of the teachers, and things, from universities,
2 and so forth, that could do that in rural settings
3 rather than the time that we typically think of AP
4 experiences.

5 VOICE: It would seem to me that, if you
6 are offering something during the summer, that they
7 would complete that in August and that wouldn't
8 coincide with the testing time.

9 One thing, again, that I said that we have
10 done is we have, to extend the period or extend the
11 time that they met, is that we meet everyday with the
12 students in our calculus class and some other
13 classes.

14 I think you are probably wondering about
15 the problem of having a teacher teach the AP class
16 during the year?

17 VOICE: No, I am just think of creative
18 ways to get kids more interested. I might not want
19 to be challenged by an AP class during my regular
20 school year plus the challenge of getting a qualified
21 teacher.

22 (inaudible) more people involved, more

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1 kids challenged. What we need is some creative
2 testing, I think, (inaudible).

3 VOICE: During the summer, as I mentioned
4 earlier in my presentation, we offer a pre-calculus
5 class for students who want to do that.

6 We have approximately 25 students signed
7 up in the summer, and it is taught by the AP calculus
8 teacher, who-- I mean (inaudible) from July to--

9 VOICE: (inaudible).

10 VOICE: Well, it is a pre-calculus class.
11 It is a class that precedes calculus, trigonometry
12 (inaudible) elementary analysis.

13 This year, we are going to offer Algebra 2
14 for students who want to take it for free. They
15 don't have to pay the \$65 per semester.

16 It is going to be taught by our pre-
17 calculus teacher, so, in essence, they are going to
18 have them for the summer so there is no lag time.

19 They are going to have them in the class
20 that following year, and preferably those students
21 who finish that Algebra 2 class are going to take
22 pre-calculus during the summer, so we have a two-year

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1 block.

2 I think, if we can look at the curriculum
3 in the sense that what is our goal, again the
4 calculus class a being the capstone course for these
5 people, a lot can get done during those two years.

6 VOICE: And, on a practical note, you
7 would have to consider subsidizing them, because most
8 of my poor kids need jobs in the summer.

9 So, they would have to make money, too,
10 somehow while they were going to do that.

11 VOICE: There is a partnership program
12 that we have in San Antonio that allows--that pays
13 the students to come to school (inaudible) project
14 (inaudible) in San Antonio.

15 We also have an educational partnership in
16 San Antonio that pays for students' college and books
17 for two years if they attend the college university
18 in San Antonio.

19 So, these are some efforts that you might
20 want to look at in terms of getting support.

21 VOICE: Other questions? If not, I want
22 to thank all of you for coming, thank our panelists

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1 again. You did a great job. Thank you so much.

2 (Applause.)

3 (Whereupon, the meeting was adjourned.)

4

5 (End Tape Side B.)

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